

Clinical Trial Protocol

Iranian Registry of Clinical Trials

12 Jul 2026

Effects of cerebellar transcranial direct current stimulation (tDCS) on Timed Up and Go test with foot placement in chronic stroke patients

Protocol summary

Study aim

The aim of this study is investigating the effect of cerebellar transcranial direct current stimulation (tDCS) on Timed Up and Go test with foot placement in chronic stroke patients.

Design

This study is single group design. A 20 chronic stroke patients, available in university clinics will participate in this study.

Settings and conduct

Timed Up and Go test will be carried out before and after of intervention with four different types of foot placements including spontaneous foot position, symmetric foot position, affected foot placed behind the unaffected foot position, unaffected foot placed behind the affected foot position and scores will be recorded. Patients will receive cerebellar tDCS for 20 minutes. The active anode electrode is placed over ipsilateral cerebellum and returning electrode is placed over right arm. Also each test procedure will be randomly performed by the patients.

Participants/Inclusion and exclusion criteria

Patients should be in chronic phase, more than six months post-stroke; Any other condition apart from stroke that affects patients' gait.

Intervention groups

The study is single group design, and cerebellar transcranial direct current stimulation (tDCS) is the intervention.

Main outcome variables

The primary outcome measure is the time of Timed Up and Go test that will be assessed before and after of intervention.

General information

Reason for update

Acronym

tDCS

IRCT registration information

IRCT registration number: **IRCT20160424027562N5**

Registration date: **2018-01-09, 1396/10/19**

Registration timing: **prospective**

Last update: **2018-01-09, 1396/10/19**

Update count: **0**

Registration date

2018-01-09, 1396/10/19

Registrant information

Name

Roghayeh Mohammadi

Name of organization / entity

Semnan University of Medical Sciences

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-01-15, 1396/10/25

Expected recruitment end date

2018-03-21, 1397/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of cerebellar transcranial direct current stimulation (tDCS) on Timed Up and Go test with foot placement in chronic stroke patients

Public title

Effects of cerebellar transcranial direct current stimulation in chronic stroke patients

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

All the participants will be in chronic phase, more than six months post-stroke. The age of patients will be within rang of 45-70 years. Plantar flexore muscle spasticity should be less than 3. Lower extremity Fugle-Mayer scale should be more than 22.

Exclusion criteria:

If there is major cognitive problems. Any condition (either fractures or other disease apart from stroke) that affects patients gait. If there is sever aphasia.

Age

From **45 years** old to **70 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **20**

Randomization (investigator's opinion)

N/A

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Single

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Semnan University of Medical Sciences

Street address

Semnan University of Medical Sciences, Basij Blvd, Semnan

City

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Province

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Postal code

3514799442

Approval date

2017-12-12, 1396/09/21

Ethics committee reference number

IR.SEMUMS.REC.1396.167

Health conditions studied**1****Description of health condition studied**

Stroke

ICD-10 code

I67.9

ICD-10 code description

Cerebrovascular disease, unspecified

Primary outcomes**1****Description**

The time of Timed Up and Go test

Timepoint

Immediately before and after of intervention

Method of measurement

By Chronometer

Secondary outcomes**1****Description**

Berg Balance Scale

Timepoint

Immediately before and after intervention

Method of measurement

Berg Questionare

Intervention groups**1****Description**

Intervention group: Patients will receive cerebellar transcranial direct current stimulation for 20 minutes with intensity of 1.5 milliampere. The active anode electrode is placed over ipsilateral cerebellum (1 cm below inion of occiputalbone and 1 cm medial to mastoid process) and returning electrode is placed over right arm.

Category

Rehabilitation

Recruitment centers**1****Recruitment center****Name of recruitment center**

Neuromuscular Rehabilitation Research Center

Full name of responsible person

Roghayeh Mohammadi

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Semnan University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Semnan University of Medical Sciences

Full name of responsible person

Roghayeh Mohammadi

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Physiotherapy

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Web page address**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to
make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to
make this available

Statistical Analysis Plan

Not applicable

Informed Consent Form

Undecided - It is not yet known if there will be a plan to
make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to
make this available

Analytic Code

Not applicable

Data Dictionary

Undecided - It is not yet known if there will be a plan to
make this available